

## CLAIMS

1. A system comprising in combination:

a vehicle having a pneumatic pressure source for supplying a predetermined flow of pneumatic fluid to a plurality of passenger positions, the pneumatic pressure source  
5 having a plurality of leads, each of the plurality of leads extending to a connection port, the plurality of leads being distributed throughout the vehicle such that each of the plurality of passenger positions is equipped with at least one connection port; and

at least one inflatable compression sleeve having a plurality of inflatable chambers therein, the at least one sleeve constructed and arranged to be engaged to the at  
10 least one connection port, thereby providing fluid communication between the pneumatic pressure source and the plurality of chambers.

2. The system of claim 1 further comprising at least one pneumatic controller, the at least one pneumatic controller being in fluid communication with the pneumatic pressure source and the plurality of leads, the at least one pneumatic controller constructed and  
15 arranged to periodically interrupt the flow of pneumatic fluid from the pneumatic pressure source to the plurality of leads.

3. The system of claim 2 wherein the at least one pneumatic controller further comprises a plurality of pneumatic controllers, each of the pneumatic controllers constructed and arranged to be operatively engaged to one of the inflatable chambers of the at least one  
20 sleeve.

4. The system of claim 1 wherein the plurality of chambers are constructed and arranged to be inflated according to a predetermined sequence.

5. The system of claim 4 wherein the plurality of chambers are constructed and arranged to be deflated according to a predetermined sequence.

25 6. The system of claim 1 wherein the predetermined flow of pneumatic fluid provides each of the plurality of chambers with a predetermined inflation pressure of about 20 mmHg to about 150 mmHg.

7. The system of claim 1 further comprising an inflation member and the at least one sleeve having an inflation member engagement port, each of the plurality of chambers being

in fluid communication with the inflation member engagement port, the inflation member having a first end and a second end, the first end being in fluid communication with the second end, the first end adapted to be engaged to the connection port, the second end adapted to be engaged to the inflation member engagement port.

- 5 8. The system of claim 5 wherein the at least one sleeve further comprises a control valve, the control valve constructed and arranged to release the predetermined pressure from the plurality of chambers.
9. The system of claim 1 wherein the at least one sleeve is adapted to be disposed about at least one leg of a passenger.
- 10 10. The system of claim 6 wherein the at least one sleeve further comprises a plurality of securement straps.
11. The system of claim 8 wherein the plurality of securement straps are adjustable.
12. The system of claim 1 wherein the pneumatic fluid is air.
13. The system of claim 1 wherein the at least one sleeve comprises a plurality of
- 15 sleeves, each of the plurality of sleeves constructed and arranged to be engaged to the at least one connection ports, thereby providing fluid communication between the plurality of chambers and the pneumatic pressure source.
14. The system of claim 1 wherein the at least one sleeve is constructed from plastic.
15. The system of claim 1 wherein the at least one sleeve is disposable.
- 20 16. The system of claim 1 wherein the plurality of chambers are in fluid communication with one another.
17. The system of claim 1 wherein the at least one sleeve is integral with at least a portion of each of the plurality of passenger positions.
18. An anti-thrombosis device comprising:
- 25 a sleeve constructed and arranged to be removably disposed about an appendage, the sleeve having a plurality of inflatable chambers constructed and arranged to be inflated from an uninflated state to an inflated state when in fluid communication with a positive pressure source, the plurality of inflatable chambers comprising a first inflatable chamber and a second inflatable chamber, the first inflatable chamber in fluid

communication with the second inflation chamber, when the first inflatable chamber is in fluid communication with the positive pressure source the first inflatable chamber being inflated to the inflated state, the second inflatable chamber being inflated to the inflated state subsequent to inflation of the first inflatable chamber.

5 19. The anti-thrombosis device of claim 18 wherein the plurality of inflatable chambers further comprises a third inflatable chamber, the third inflatable chamber being inflated to the inflated state subsequent to inflation of the second inflatable chamber.

20. The anti-thrombosis device of claim 19 wherein the plurality of inflatable chambers further comprises a fourth inflatable chamber, the fourth inflatable chamber being inflated to  
10 the inflated state subsequent to inflation of the third inflatable chamber.

21. The anti-thrombosis device of claim 20 wherein the plurality of inflatable chambers further comprises a fifth inflatable chamber, the fifth inflatable chamber being inflated to the inflated state subsequent to inflation of the fourth inflatable chamber.

22. The anti-thrombosis device of claim 21 wherein the plurality of inflatable chambers  
15 further comprises a sixth inflatable chamber, the sixth inflatable chamber being inflated to the inflated state subsequent to inflation of the fifth inflatable chamber.

23. The anti-thrombosis device of claim 18 wherein the positive pressure source is portable.

24. The anti-thrombosis device of claim 18 wherein the positive pressure source is a  
20 pneumatic pressure source of a vehicle.

25. The anti-thrombosis device of claim 24 wherein the vehicle is an airplane.

26. The anti-thrombosis device of claim 18 wherein each of the plurality of inflatable chambers are separated by at least one pressure valve.

27. The anti-thrombosis device of claim 18 wherein each of the plurality of inflatable  
25 chambers are separated by at least one check valve.

28. The anti-thrombosis device of claim 26 wherein each of the at least one pressure valves are comprised of a biasing member and a ball, the biasing member biasing the ball in a first position with in the at least one pressure valve, the ball being placed in a second position when the inflatable chamber adjacent thereto is in the inflated state.